DOCUMENT RESUME

ED 261 233 CE 042 459

TITLE	An Evaluation of Business Teacher Education in Connecticut.
INSTITUTION	RMC Research Corp., Hampton, N.H.
SPONS AGENCY	Connecticut State Dept. of Education, Hartford. Div. of Vocational, Technical, and Adult Education.
PUB DATE	Mar 85
NOTE	64p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Business Education Teachers; Comparative Analysis; *Educational Needs; *Inservice Teacher Education; Labor Needs; Needs Assessment; Postsecondary Education; *Preservice Teacher Education; Program Effectiveness; Program Improvement; Questionnaires; Relevance (Education); *School Effectiveness; State Surveys; *Statewide Planning; Student Needs; Teacher Attitudes; Teacher Certification
IDENTIFIERS	*Connecticut

ABSTRACT

This study evaluates pre- and inservice training of business educators in Connecticut. Data from a questionnaire returned by 820 of 912 business teachers in Connecticut indicated that over 60 percent of them received their undergraduate training in the state. The teachers indicated that general professional education courses were not worthwhile, business methods and curriculum courses were sometimes helpful, and courses in business content and skills were the most beneficial. They felt that their preservice training was most lacking in training in the use of modern technology and equipment, testing and grading, classroom management, and techniques for dealing with students of varied abilities and other characteristics. A review of the literature indicated that the information gathered from the teachers in the study is consistent with the findings of other research and also reflects many of the concerns that employers have concerning the type of training provided to teachers of secondary-level business students. Ten recommendations for improving the pre- and inservice education of business teachers were set forth. (Appendixes to this report include the teacher questionnaire and response frequencies, results of the non-multiple-choice questionnaire items, Connecticut certification requirements for business and office education teachers, and National Association for Business Teacher Education standards. (MN)

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ED261233

AN EVALUATION OF BUSINESS TEACHER EDUCATION IN CONNECTICUT

March, 1985

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CE 043459

This project was supported by funds made available to Connecticut under the Vocational Education Act of 1976, P.L. 94-482.

All opinions expressed reflect the views of the authors and are not necessarily those of the State Department of Education.

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ACKNOWLEDGMENTS

This study of business teacher education was a joint effort on the part of the Connecticut State Department of Education (CSDE), RMC Research Corporation, and an advisory committee formed specifically for the project. The CSDE project monitor was Valerie Pichanick of the Division of Vocational, Technical, and Adult Education. Substantial contributions were also made by Joan S. Briggaman of the Division of Vocational, Technical, and Adult Education and Joan B. Baron of the Bureau of Research, Planning, and Evaluation.

The members of the advisory committee for the project were:

Dr. Alfred Boulden	Central Connecticut State University
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Ms. Dianne M. Glidden	Travelers Insurance Company
Mr. Howard Gold	West Hartford School System
Dr. Patrick B. Mullarney	University of Connecticut
Mr. Chris Soulias	First Federal Savings and Loan of Madison

At RMC the project was implemented by Jacquie Olansen, Stuart Kahl, and Larry Erhard.

PROJECT OVERVIEW

The purpose of this study was to evaluate the appropriateness of preservice and inservice training of business educators in Connecticut. This evaluation addressed teacher competencies in their content area, familiarity with and use of equipment and curricular materials, instructional practices, and the handling of classroom and school problems. It is likely that changes in business education programs are necessary to keep abreast of technical improvements both at the secondary school level and in teacher preservice and inservice training. The results of this study help to identify strategies for improving and updating the instruction provided to secondary business and office education students.

The staffs of both RMC Research Corporation and the Connecticut State Department of Education worked jointly on all aspects of this project. RMC, as the contractor for the 1983-84 Connecticut Assessment of Educational Progress (CAEP) in Business and Office Education, was in a particularly advantageous position to conduct this study. One component of the CAEP assessment of student achievement was the administration of a questionnaire to business and office education teachers requesting information on various background, instructional, and attitudinal variables. Thus, there was already an existing mechanism for gathering information from all business and office education teachers in Connecticut. That instrument, of course, was substantially expanded to address the factors of interest in this evaluation of teacher education. What was more important, however, was that the independent tasks of each project complemented each other. Both were ultimately concerned with the improvement of instructional programs.

Objectives

The National Business Education Association Task Force on New Concepts and Strategies for Business Education, in its report series of May, 1983, stated: "Because business education cannot be viewed apart from the society in which it functions, the need is urgent for all business educators -- and indeed all who have a stake in business education -- to reevaluate all aspects of business education to insure that the needs and demands for entrepreneurs, managers, and technical workers will be met and that business education will continue to contribute to the general education of all citizens." They further recommended that business education programs at the secondary level offer entry-level job preparation in the general administrative systems of companies and government.

With the ultimate goal of gathering information that will help in the improvement of instruction in high school business and office education programs, this study was designed to address the following objectives:

1. to determine preservice and inservice training needs as perceived by business teachers themselves;

2. to identify current and projected business and office skill requirements in Connecticut;

3. to determine the relevance of existing business teacher education programs to current business needs;

4. to compare Connecticut business teacher education programs with those of other states with similar business and office employment bases;

5. to recommend appropriate changes in characteristics and priorities of preservice and inservice business teacher education programs.

Design

The RMC staff members involved in the study met with appropriate CSDE staff to discuss the administrative details of this project and to modify any plans outlined in the proposal. An advisory committee was formed, composed of business people and business educators at the high school and college level. Its purpose was to assist in the general planning of all project activities, identification of information that was to be gathered from teachers by means of a survey instrument, and the identification of information sources related to the project. This committee also met to review the information gathered during the various project activities and discuss interpretations of the data for the purpose of making recommendations which are incorporated into this project report.

The main information source utilized was the teacher questionnaire. Its purpose was to provide information on the business and office education teachers' preservice and inservice training as well as their attitudes and activities related to instruction. RMC staff developed survey questions which were reviewed by the CSDE staff and the advisory committee and then revised accordingly. The final typeset instruments (see Appendix A) were included in the shipments of student testing materials to all high schools in the state offering business and office education courses. Previous written communication with each school determined the required number of questionnaires. Questionnaire answer sheets were returned to RMC along with the student answer sheets.

A survey of current, relevant literature available on present and projected needs in business and office education was also made. Sources of most help in the search process were the recommendations of the advisory committee; the ERIC Clearinghouse for Vocational Education in Columbus, Ohio; faculty members from various state universities; the ERIC education index; recent dissertation abstracts; and bibliographies of documents themselves.

Highlights of the Findings

Generally, the business and office education teachers in Connecticut have many years of teaching experience as well as some first-hand office experience, and are active in professional business education groups. They have very positive views about their preservice and inservice training experiences.

According to the teachers, most lacking in their preservice training was attention to modern technology and equipment, testing and grading, classroom management, and techniques for dealing with students having varied abilities

and other characteristics. These are also the areas in which they feel the greatest need for inservice. Interestingly, technology-related topics are the topics most covered by the workshops they do attend.

The teachers indicated that general, professional education courses were not worthwhile, business methods and curriculum courses were sometimes helpful, and courses in business content and skills were the most beneficial. Concerns of the teachers not already mentioned include the need for knowledge of current needs of employers, the low status of business and office education compared to other curricular programs, and the low abilities of their students.

The review of the literature indicated that the information gathered directly from the teachers in this study is consistent with the findings of other research. The literature also suggests that employers generally share the concerns of the teachers, but may be a little more concerned about such things as work ethics (e.g., tardiness, absenteeism) and skills in human relations and communications.

The findings of this study have many implications pertaining to the qualifications of teachers, improved teacher training in certain priority areas, means of disseminating information to teachers other than preservice and inservice training, and raising the status of business and office education in the schools. In the next three chapters of this report, the specific findings of the study are described, and in the final chapter, several recommendations are made.

REVIEW OF LITERATURE

The documents reviewed in conjunction with this evaluation included journal articles, reports of professional groups and government agencies, and a large number of dissertations. Because of the great commonality in the content of the literature, detailed explanation of the findings and views expressed are not presented for each document separately. Instead this section is a discussion of the general "messages" in the literature with the pertinent references listed appropriately. More complete documentation of the references cited is provided in the "Bibliography".

The Needs of Students in Business and Office Education Programs

A large number of documents present listings of desired competencies that business and office education students should develop in their high school programs (California State Department of Education, 1983; Denee, 1981; D'Onofrio, 1976; Fairchild and Gillipan, 1982; Guffey, 1980; Harbert, 1980; Jenkins, 1980; NBEA Task Force, 1983; Sorensen, 1982; White, 1983). Whether based upon surveys or informed judgment and whether focussed upon a particular business and office specialty or the general field, most of these lists had two important characteristics. First, they communicated in some way the importance of students gaining a knowledge of modern business technology and equipment. Some of the articles gave considerable attention to the notion of how critical it is for business and office educators to keep updating their curricula (Dauwalder, 1983; Jenkins, 1980; Price, 1983). Second, the lists of competencies included not only skills unique to business and office areas, but also more generalized skills such as competencies in language arts, mathematics, problem solving, oral communication and personal relations.

The body of literature addressing the issue, "Which are more important -- specific business skills or the more general skills?" is sizable (Black, 1981; Bogatt, 1979; Cast, 1981; de Lone, 1981; Dunham, 1981; Gallo, 1982; Gilbreath, 1982; Good, 1980; Wallingford, 1974). The focus of these documents is on what employers are looking for, sometimes in contrast to what teachers emphasize. The general consensus is that employers are more interested in verbal and written communication skills, mathematical ability, reasoning ability, human relations skills, positive attitudes, and ethical behavior, while the teachers seem to be more concerned with the specialty skills of business and office education. Clearly, both types of skills are important.

The Needs of Business and Office Education Teachers

Upon reviewing the research and other literature on business teacher education, one readily sees four or five recurring themes in the topics addressed and in the conclusions drawn by the authors. There is a general recognition that business teachers have a great need (and desire) for training in various areas of computer technology (Cook, 1981; Gilbreath, 1982; Nazir, 1980; Olivo, 1982; Policies Commission for Business and Economic Education, 1983; Stenzel, 1982; Wallace, 1982). Apparently, their training is also inadequate in the

traditional teacher education topics of classroom management, evaluation, discipline, student motivation, and dealing with students having special needs (Armbruster, 1978; Gilbreath, 1982; Montgomery, 1983; Nelson, 1982).

Teachers are generally satisfied with the training they have had and recognize its positive impacts (Cook, 1981; Rice, 1979; Slaugh, 1983). Furthermore, they clearly see the need for additional inservice. Release time and course credit for inservice are, of course, important considerations (Gabbert, 1983; Hall, 1983).

A considerable portion of the literature deals with the means by which business teachers can keep up-to-date in their fields. There is strong agreement that, in addition to continuous inservice, business teachers should be expected to keep abreast of their fields by obtaining first-hand office experience on a regular basis. Trainers of the business teachers as well as the teachers themselves should keep involved with business and industry (Galen, 1978; Gay, 1978; Hanes, 1982; Nazir, 1980; Putnam, 1982; Rucker, 1983).

CURRENT TEACHER EDUCATION PROGRAMS IN BUSINESS AND OFFICE EDUCATION

Of the 820 teachers completing the questionnaire, over 60 percent received their undergraduate degree in Connecticut. Thirty-four percent were trained at Central Connecticut State University, nine percent at the University of Connecticut, and seven percent at the University of Bridgeport. The other institutions attended by the teachers, in descending order, were: University of Hartford, Sacred Heart University, Quinnipiac College, Annhurst College, Fairfield University, St. Joseph College, Southern Connecticut, University of New Haven, Western Connecticut State University, Connecticut College, Diocesan Teachers College, and Eastern Connecticut State University.

The requirements for business education majors at the two primary "trainers" of business teachers are listed below:

Central Connecticut State University

- 130 total semester hours for graduation
- 62 semester hours in general education including 6 credits in each of the following: communication skills, literature, mathematics/logic, cultural-philosophical studies, history, behavioral science, social science, artistic and supplemental disciplines; and 2 credits in physical education.
- specific requirements for each of three majors:

  Secretarial Majors
  - 49 semester hours in Business Administration and Business Education including:
    - -- 12 semester hours in core requirements
    - -- 21 semester hours in business education major
    - -- 16 semester hours in options (e.g., office systems, word processing)
  - 19 semester hours in professional education

  Marketing Majors and Accounting Majors
  - 51 semester hours in Business Administration and Business Education including:
    - -- 36 semester hours in core requirements
    - -- 15 semester hours in specific major
  - 19 semester hours in professional education

University of Connecticut

- 120 total credits required for graduation
- 42 credits in general education including 6 credits in each of English and social science/history, 3 credits in mathematics or science or fine arts or foreign language
- 36 credits in major area including:
  - -- 24 credits in one or two closely related departments
  - -- 6 credits in subject areas such as accounting, general business, executive office and industrial administration, finance
- 21 credits professional education

The teacher questionnaire results showed that of the teachers who received their undergraduate degrees from out-of-state colleges or universities, the largest number (85) graduated from Massachusetts institutions. Of those teachers, 27 graduated from American International College (AIC) in Springfield and 25 from Salem State College. New York and Rhode Island schools each graduated 43 of the Connecticut business teachers. Appendix B provides greater detail on the institutions from which the Connecticut teachers graduated.

Appendix C shows the recently proposed certification requirements for Connecticut business and office education teachers. Provided in Appendix D are the standards proposed by the National Association for Business Teacher Education (NABTE) in response to the requirement of the National Council for Accreditation of Teacher Education. Although these two documents use different classification schemes, the Connecticut requirements are quite consistent with the NABTE standards.

A more detailed review of the requirements for graduation of Central Connecticut State University and the University of Connecticut was conducted for purposes of comparison both with each other and against the proposed state certification requirements. Once again, because of different categorization schemes, course titles, etc., a great deal of caution must be exercised when making such comparisons. The general information regarding the requirements of those institutions presented on the previous page is sufficient to illustrate the results of the comparative analyses. Central Connecticut State appears to expect somewhat more in terms of minimum requirements, and thus, its program description is more consistent with the proposed statewide requirements in appearance. This is the case for business and office education courses, as well as for coursework in the general education areas. At this point, however, the reader should be cautioned that this finding is not necessarily indicative of deficiencies in the program at the University of Connecticut. First, it could well reflect a difference in philosophy in setting minimum requirements. Lower minimums may, in some ways, allow greater flexibility in designing programs for individuals. Furthermore, if the state certification requirements are more stringent, then the institutional requirements are irrelevant if a student is attending the institution in order to become a certified business teacher. Awareness of the certification requirements and/or responsible guidance are critical.

As part of this evaluation, the certification requirements for business teachers in other states were also examined for purposes of comparison. Again, the problems and issues discussed above apply. Ultimately what is important is the quality and the extent of training the prospective teachers receive. The latter is reflected in Table 1 below which reports the numbers of undergraduate courses completed in various areas by teachers from the University of Connecticut (UConn), Central Connecticut State University (CCSU), other in-state institutions, and out-of-state institutions. This information is drawn from the teacher questionnaire data. Because there are teachers who may not have intended to become business and office education teachers as undergraduates, the analyses conducted in order to produce Table 1 were run for teachers who intended to become business teachers upon entering school (approximately one-half of the teachers) as well as for all of the teachers completing the questionnaire.

TABLE 1

Undergraduate Courses Taken by Connecticut Business Teachers

Subject	All BOE Teachers (%)					Teachers Intending to Teach BOE Upon Entering College (%)				
	Min # Crs Taken	UConn	CCSU	Other In-St	Out-of State	Min # Crs Taken	UConn	CCSU	Other In-St	Out-of State
Typing	2	60	80	50	73	3	30	46	43	60
Shorthand	2	39	65	36	67	3	25	57	30	55
Ofc Systems	1	63	80	69	73	1	75	83	68	87
Word Proc	1	11	13	14	11	1	10	14	14	13
Data Proc	1	41	57	34	34	2	30	17	12	14
Accounting	4	30	43	49	39	3	40	62	61	59
Economics	3	51	16	42	34	2	85	55	74	62
Marketing	2	55	33	56	35	1	100	77	73	65
Bus Admin	2	64	29	59	44	2	39	23	41	33
Mngrl Commo	2	23	14	29	24	1	80	56	52	55
Bus Law	2	67	70	58	52	2	75	68	59	48
Gen'l Ed	3	54	75	67	65	2	74	93	86	91
BOE Meth/Curr	3	33	64	29	43	3	42	71	45	53
Other BOE	4	44	44	40	44	4	37	45	42	49
Math	2	72	88	71	67	2	65	85	62	64
Lang Arts	4	40	58	54	58	4	37	61	55	57
# Tchrs/Category		74	274	147	304		20	168	46	150

The table shows the percentages of teachers in different institutional categories who took a designated number of courses or more in each of several subject areas. The designated "minimum number of courses" was based on reversals in the data for the University of Connecticut and Central Connecticut State University. For example, for the subject of "typing", the percentages of teachers claiming they took "0" courses or "1" course were greater for the University of Connecticut graduates than for the Central Connecticut State graduates. The reverse was the case for the percentages of teachers who indicated "2", "3", or "4 or more" courses. Thus, the minimum number of typing courses used for "typing" in Table 1 under "All BOE Teachers" was two.

Clear patterns can be seen in the data. For many subject areas, the differences in the extent of coursework completed by University of Connecticut graduates and graduates of other institutions are substantial. The differences between the University of Connecticut and Central Connecticut State are generally the same as differences between the University of Connecticut and other institutions. Central Connecticut State graduates have a clear edge in terms of coursework in the office skills areas (typing, shorthand, office systems, data processing, and accounting) and in general education, business and office education methods/curriculum, mathematics, and language arts. University of Connecticut graduates have completed more coursework in business subjects (economics, marketing, business administration, managerial communications, and business law). Because some of the differences are substantial, they could be indicative of serious weaknesses in some of the programs.

RESULTS OF THE TEACHER QUESTIONNAIRE

The CAEP Assessment of Business and Office Education tested all 12th grade students in the State of Connecticut who were enrolled in business and office education programs during the 1983-84 school year. A regular component of any CAEP assessment is the administration of student, teacher, and principal questionnaires. For the purposes of this special study of business teacher education, the teacher questionnaire was expanded considerably in scope since the traditional CAEP questionnaire generally focuses more on classroom practices and other characteristics of instructional programs than on the nature of teacher preparation. The instrument consisted of 164 questions. The teacher questionnaires were shipped to schools along with the other student assessment materials, and the assessment testing coordinator in each school was responsible for distributing questionnaires to every teacher of a business and office education course. The teachers recorded their responses on a separate answer sheet. The last four questions in the instrument were of the free-response type and asked teachers about the strengths and weaknesses of their training and their perceived needs for additional training. The teachers wrote their responses to these questions on the back of their answer sheets and when finished, inserted their answer sheets in envelopes. These envelopes were not opened until after they had been returned to RMC along with the student answer sheets. Approximately 820 secondary business and office education teachers out of 912 in the state answered the questionnaire items.

The remainder of this chapter summarizes the findings of the questionnaire analyses. The instrument itself and the results for each question are provided in appendices of this report.

Training and Experience

General

Generally, the business and office education teachers in Connecticut have been teaching for many years. Forty-seven percent reported that they had been teaching for more than 15 years, and just over four-fifths have been teaching for more than 8 years. For their highest degree or completed academic program, 85 percent reported degrees beyond a bachelor's (e.g., bachelor's degree plus 30 hours or master's degree, master's degree plus 30 hours, or doctorate). Eighty-five percent also reported that most of their coursework in a masters program was in some area of education, and 43 percent indicated "business education" specifically.

Almost two-thirds of the business and office education teachers in Connecticut received their undergraduate degrees from an in-state college or university. Thirty-four percent received their undergraduate degree from Central Connecticut State University, 9 percent from the University of Connecticut, and 18 percent from other in-state colleges or universities. The University of Bridgeport was the third most frequently named in-state institution after Central and the University of Connecticut. Undergraduate degrees were received from institutions in 36 different states; however, institutions in Massachusetts, New York, and Rhode Island were mentioned far more than institutions in other states.

Over two-thirds of the business and office education teachers in Connecticut reported that they had had at least 1,000 hours of business and office related paid work experience before completion of their bachelor's degree. Over a third have held a business position utilizing the skills that they teach within the past five years. Over a half had held such a position within the past 10 years. Almost all (94 percent) of the teachers thought that this type of work experience is an important part of the preparation of business teachers. Sixty percent of the teachers reported that in five years they will still be working at their same job or teaching other business education courses. Fifteen percent will be retired.

Coursework

The teacher questionnaire asked the teachers about the number of undergraduate and graduate courses they had taken in several business and office education topic areas. Not surprisingly, for most topics, large numbers of teachers did not have graduate training. At the undergraduate level, however, the number of areas in which large numbers of teachers had no coursework were more limited. Nevertheless, the lack of undergraduate training in some of these areas is cause for concern. Eighty-four percent of the business and office education teachers in Connecticut had no undergraduate coursework in word processing, and 54 percent had no undergraduate coursework in data processing or computers. Over a third had no coursework in shorthand. Approximately a quarter had no coursework in office systems/records management, marketing, and business administration. One can conclude that many business and office education teachers are not trained in several of the business areas. While this may be less of a concern in larger schools where there may be greater specialization within the business education department, one must wonder if teacher education programs should not prepare business and office education teachers to teach in any setting -- small schools as well as large schools. The subject of coursework will be raised again in subsequent paragraphs dealing with the adequacy of teacher preparation.

Other Preservices Experiences

Only 44 percent of the teachers reported that their preservice program provided them with field experience in the schools prior to their senior years. This is something which is gradually changing in teacher education as a result of the concern that the senior year is somewhat late for students to find out that they may not want to be teachers, and field experience is critical to that realization. Over 80 percent of the business and office education teachers had more than six weeks of student teaching. Over 60 percent had more than eight weeks, and over 30 percent had more than 10 weeks. Nine out of ten teachers student taught in more than one course, and almost four-fifths participated in student teaching in one of the business and office education courses they are currently teaching. Almost all of the teachers (93 percent) taught entire classes independently as part of their student teaching experience.

Inservice

Connecticut business teachers are apparently quite receptive to inservice. Although 83 percent reported that participation in inservice workshops in not required by their administration, 69 percent reported that their administration encouraged them to participate in such workshops. Ten percent of the teachers reported that they attend no inservice business education workshops yearly. However, over two-thirds of the teachers reported that they attend two or more such workshops yearly. Twenty percent attend four or more workshops yearly.

Almost all teachers reported that they read business education periodicals regularly. Half of the teachers read three or more such periodicals regularly. Eighty-five percent of the teachers belong to professional business educators' organizations, and 46 percent belong to more than one.

Approximately two-thirds of the teachers find inservice programs provided by the State Department of Education to be very or somewhat worthwhile. Next in terms of how worthwhile they are perceived are programs sponsored by professional organizations, private industry, and the local school systems. The local systems' programs are considered very or somewhat worthwhile by just over half of the teachers. Apparently, only a third of the teachers have ever participated in programs provided by regional education service centers and teacher centers, although those who have participated in such programs have generally found them worthwhile.

Table 2 shows the topics of workshops most frequently attended by Connecticut business and office education teachers. Clearly the emphasis in the table is almost exclusively on technology.

TABLE 2

Topics of Workshops Most Frequently Attended

Workshop Topic	% of Teachers Attending Workshop on Topic in Past 3 Years
use of computers in classroom	72
word processing	61
curriculum review/change	58
BASIC computer programming	54
teaching techniques/methods	49
computer software	41
new technology in business	38
entry-level business employment information	36
use of instructional equipment	34

Adequacy of Preparation

Teachers were asked to rate the adequacy of their preparation (preservice and inservice) in each of the following areas: classroom management/records, preparation of lessons, planning, maintaining discipline, test preparation and grading, presentation of lessons, and use of office equipment. Across all of these areas, the percentage of teachers indicating their training was "very adequate" ranged from 50 to 78 percent. The bulk of the remaining teachers selected "marginally adequate". Thus, business and office education teachers in Connecticut generally feel well prepared to teach. Of the aforementioned areas, the two in which the teachers felt best prepared were preparation and presentation of lessons. The area in which preparation was weakest, although not particularly poor according to the teachers, was the area of maintaining discipline -- this is nothing new.

Apparently business and office education teachers do value their undergraduate coursework in business and office education. Table 3 below clearly shows that the more undergraduate courses the teachers had in the area depicted in the table, the more likely they are to view their preparation favorably. This result would be of little significance if most of the teachers were just out of school; however, most of the teachers of business and office education courses in Connecticut had many years of teaching experience behind them at the time they completed the questionnaire.

TABLE 3

Relationship Between Course-Taking and Adequacy of Preparation in Use of Office Equipment

Subject	No. Undergraduate Courses Taken	Percentages of Teachers Judging Preparation to be: Very Adequate	Marginally Adequate	Not Adequate	
Typing	0 or 1	37%	44%	18%	100%
	2 or more	63%	31%	6%	100%
Office Systems/ Records	0	42%	40%	18%	100%
	1 or more	60%	34%	7%	100%
BOE Methods/ Curriculum Courses	0	41%	40%	20%	100%
	1	48%	41%	11%	100%
	2	54%	37%	10%	100%
	3	58%	37%	5%	100%
	4 or more	68%	27%	5%	100%

Forty-eight percent of the Connecticut business and office education teachers intended to become business and office education teachers when they entered college, and 51 percent did not. Logically, there is a relationship between the time of their commitment to being a business teacher and the number of courses they completed as part of their teacher preparation. While this relationship holds for several of the courses dealt with in the teacher questionnaire, Table 4 illustrates the relationship for one type of course in particular -- namely, methods and curriculum courses. Of the teachers who did not intend to teach business courses upon entering college, over a quarter took no undergraduate courses in business and office education methods/curriculum. While many of these teachers may have ultimately taken such courses at the graduate level, this would have occurred after they were already on the job in most cases. That is, many of them entered business and office education teaching without benefit of training in the methods and curricula in that area.

TABLE 4

Relationship Between Time of Commitment to Being a Business Teacher and Number of Courses Taken in BOE Methods/Curriculum

	Percentage of Teachers Taking:			
	0 Courses	1 to 3 Courses	4 or More Courses	
Intended to Teach BOE When Entered College (n = 376)	5%	56%	39%	100%
Did Not Intend to Teach BOE When Entered College (n=401)	26%	53%	21%	100%

Table 5 illustrates a related point. Teachers who intended to teach business and office education courses upon entering college felt better about the adequacy of their training in the use of office equipment than those who were late converts to business and office education. These data raise the question of whether or not the late-comers to business and office education teaching are preparing to teach in this area to the same extent as those who committed themselves earlier to the field.

TABLE 5

Relationship Between Adequacy of Preparation in Use of Office Equipment and Time of Commitment to Being A Business Teacher

	Percentage of Teachers Judging Training to be:			
	Very Adequate	Marginally Adequate	Not Adequate	
Intended to Teach BOE When Entered College (n = 390)	65%	30%	5%	100%
Did Not Intend to Teach BOE When Entered College (n=413)	46%	40%	14%	100%

Earlier, teachers' perceptions of the importance of business experience before teaching was discussed. Additional analyses further confirm their perceptions. Of the teachers who had at least 1,000 hours of business and office experience before graduating, 60 percent felt that their preparation in the use of office equipment was "very adequate". Of those who did not have this previous job experience, only 45 percent indicated that their preparation was "very adequate".

Instructional Programs

Enrollments

For approximately 72 percent of the teachers, the total of the enrollments of the business and office education classes they teach is over 70 students. As for enrollment changes over the past five years, about a third of the teachers reported that their enrollments were increasing, another third reported that their enrollments were decreasing, and the remaining third reported that enrollments were staying about the same. When one analyzes enrollment changes separately based on information from teachers of general business knowledge (e.g., business dynamics, economics), accounting, and skills courses (e.g., typing, shorthand) the proportions reporting increases, decreases and little change remain about the same.

Teaching Practice

Most of the business and office education teachers (85 percent) do not teach courses other than business and office education courses. Forty-five percent of the teachers claim they give a great deal of attention to their students' writing skills, and 44 percent claim that they give moderate attention to their students' writing skills. Sometimes two or more teachers teach the same course to different classes of students. Sixty-two percent of the teachers claim that when this is the case they are required to use the same instructional materials (textbooks, office machines, etc.). Teachers of

courses within three different business and office areas were asked about various instructional activities they conduct. The three areas were the general business knowledge topics cited previously, accounting, and secretary/general office skills. Forty-five percent of the teachers of general business knowledge courses reported that their students read the textbook or do activities in the textbook during class "just about daily". Another 30 percent reported that their students did this "at least once a week". Almost four-fifths of these teachers do report that they discuss current events in the world of business with students at least weekly. There is moderate usage of films, filmstrips, cassettes, and videotapes as three-fourths of the teachers reported that they use such things once a month or a few times a year. Over half of the teachers in the business knowledge area reported that their students never visit community businesses and/or government offices during the year. Approximately half of these teachers attribute this to scheduling which does not allow enough time for students to visit businesses.

Seventy percent of the accounting teachers reported that their students read the textbook or do activities in the textbook during class just about daily. Another 23 percent said that is done at least once a week. Three-quarters of the accounting teachers report that they present information most of the class period while student listen or take notes at least weekly. One might assume that in accounting courses the students would use realistic practice sets or simulations addressing many skills and/or concepts at the same time. Apparently this is not the case as 58 percent of the accounting teachers claim that their students do such things only a few times a year and not even monthly. There is very little use of microcomputers in schools for practicing business-related computer skills in connection with accounting.

Curriculum Development Activities

The questionnaire listed a large number of curriculum development activities and asked the teachers if they had occurred in the past five years, and if so, what effect they have had on achievement. Most of the activities (e.g., revision of scope and sequence, change of textbooks, use of new objectives) have occurred in the past five years in about 90 percent of the schools. Approximately two-thirds of the teachers feel that most of these activities have resulted in greater achievement. The one activity which clearly does not happen very often is articulation with other curricular areas (language arts, mathematics, etc.). Forty-percent of the business and office education teachers reported that this has not occurred in the past five years.

Teachers' Perceptions of Problems and Needs

Teachers of secretary/general office skills were asked how important each of several skills are to today's secretary and general office workers. Most teachers rated most of the skills as being very important. The exceptions are the skills of shorthand and machine transcription. Only a few more than half of the teachers reported that these two skills were very important. This is

not a surprising result. Shorthand and machine transcription may not be used in many offices. However, students who study shorthand and machine transcription undoubtedly have better communication skills, particularly in writing. Of course, it may be that those students possess those skills before taking up shorthand and machine transcription. Student performance data clearly show that the students who have studied shorthand are the stronger business and office education students. Thus, whether training in this area is important or not, people use it to help identify stronger job applicants.

The teachers in the different business and office education areas were asked how well they have been able to keep up with technology-induced changes of various kinds. Approximately one half to three-fifths of the teachers of general business knowledge courses claimed they have kept up very well with changes in economics/finance, business management/organization, human relations, business mathematics, and writing skills. In these areas, most of the remaining teachers indicated that they have kept up marginally well with changes in technology and practices. The two areas in which it appears to be most difficult to keep up, according to the teachers' responses, are business law and computer skills.

Two-thirds to three-quarters of the accounting teachers claimed they have kept up very well with changes in accounting procedures and the use of calculating equipment. However, only 31 percent felt that they have kept up very well with changes in data processing, more than half claimed they have kept up only marginally well in this area, and 16 percent claimed they have not kept up at all in this area. How well they felt they have been able to keep up with changes in data processing does not appear to be related to the age or number of years the teachers have been teaching.

Generally, the teachers of secretary/general office skills felt they have kept up fairly well with changes in various areas within their domain. The areas in which they have been able to keep up less, although not disasterously so, include records management, machine transcription, and computer skills.

The questions dealing with the topics of workshops the business and office education teachers have attended had a response option "not available but wish they were". Table 6 below shows the topics for which the largest percentages of teachers chose this option. Interestingly, some of these topics were also listed in Table 2 which shows the topics of workshops most often attended. Those common topics are generally technology-oriented, whereas the desired topics listed in Table 6 but not included in Table 2 are traditional education topics -- writing skills, mathematics skills, evaluation and testing, and classroom management.

TABLE 6

Topics of Workshops Not Available But Desired

Workshop Topic	% of Teachers Indicating "Not available but wish they were"
entry-level business employment information	40
writing skills	36
evaluation and testing	34
mathematics skills	32
new technology in business	32
use of instructional equipment	31
classroom management	31

The teachers were asked how much of a problem is caused by each of several factors which may affect instruction and achievement in business education courses. The two factors which were identified as causing serious problems most often (39 percent and 33 percent of the teachers respectively) were a general belief that business education is "less important than other subjects" and "guidance counselors' lack of awareness of the business education course offerings". Table 7 below lists the most cited problems in rank order according to the percent of teachers identifying the factors as being serious problems or somewhat of a problem. Clearly the two overriding concerns of the teachers are the status of business and office education and the abilities of students. There is a slight tendency for younger teachers to feel that out-of-date materials and equipment pose more of a problem than older teachers feel.

TABLE 7

Factors Most Cited as Problems Affecting Instruction/Achievement

Factor	Percent of Teachers Indicating Factor is: A Serious Problem	Somewhat of a Problem
general belief business education is less important that other subjects	39	44
varying levels of intellectual ability within a specified class	21	60
guidance counselor's lack of awareness of business education department's course offerings	33	39
mismatch between student math ability and the business materials they are required to use	14	52
less "weight" given to business course grades	25	35
mismatch between student reading ability and the business materials they are required to use	11	45
out-of-date teaching equipment	22	33

One of the free-response questions at the end of the questionnaire asked the teachers which components of their undergraduate preservice training were the least beneficial or least effectively presented. By far, the most often cited components were general professional education courses and methods/curriculum courses. Many teachers also mentioned the inattention to specific topics. The most often citied topics were discipline, classroom management, and test preparation/grading. This is consistent with other questionnaire results discussed previously.

Components of their preservice teacher training which the business and office education teachers felt were most beneficial were the content area courses (business and office skills, methods/curriculum courses, and student teaching). It is interesting that the methods/curriculum courses are considered least beneficial by many teachers and most beneficial by many other teachers.

When asked what was lacking from their preservice training that would be beneficial in preservice training now, the teachers gave a variety of responses, none of the which were cited far more often than others. Their concerns seemed to involve keeping up to date with technology in terms of office equipment and computers, and dealing with students of varying characteristics -- ability, motivation, etc. Many teachers also mentioned general program characteristics and felt the need for more student teaching, greater opportunity to observe experienced teachers, and greater interaction with real businesses.

A few multiple-choice questions dealt with desired characteristics of inservice programs. Seventy-eight percent of the teachers indicated that they would be willing to travel for an hour or more to attend inservice workshops assuming time and expense are of no concern. The teachers overwhelmingly prefer attending workshops on weekdays with time charged as professional days (82 percent of the teachers). Only 10 percent prefer to attend workshops on weekdays after school, and very few prefer attending workshops on weekends during the summers. When asked how important it is that they receive course credit for attending inservice workshops, 30 percent of the teachers indicated "very important", 27 percent "somewhat important", and 41 percent "not very important". This is somewhat deceptive as there is a definite relationship between responses to this question and the highest degree held by teachers. Receiving courses credit for inservice is far more important for the teachers who hold only a bachelor's degree than it is for teachers who hold more advanced degrees.

Teachers were also asked to list the two or three topics in which they feel it would be most beneficial for them to receive inservice training. Training in computers and other modern office equipment is clearly desired by many business and office education teachers. Other important areas of interest are keeping up to date with the current needs of businesses in terms of employee skills and changes in such areas as consumer laws, agencies and taxation. Also of prime interest are the familiar topics of classroom discipline, testing, classroom management, student motivation, etc.

SUMMARY AND RECOMMENDATIONS

Summary of Findings

Most of the business and office education teachers in the State of Connecticut have many years of experience. Additionally, most have completed considerable graduate coursework in education -- 43 percent specifically in business and office education. Sixty-two percent of the teachers received their undergraduate degrees in-state. Although undergraduate business and office education program descriptions are organized very differently from institution to institution both in- and out-of-state, there is a great deal of consistency among the programs.

Approximately half of the teachers intended to become business and office education teachers upon entering college. Just under a half of them had field experience in the schools prior to their senior year, and over 80 percent had more than six weeks of student teaching. Almost all of the Connecticut teachers student taught in more than one course, including business and office education subjects they currently teach, and almost all taught entire classes independently.

The Connecticut teachers are generally active in professional business education organizations and read business education periodicals regularly. They are quite responsive to inservice. Although attendance at inservice workshops is not generally required by administrations, it is encouraged. Almost all of the teachers attend at least one inservice workshop a year, and two-thirds attend more than one per year. Most of the teachers find that inservice programs, regardless of the sponsoring agency, to be at least somewhat worthwhile. With the exception of curriculum review and teaching methods, the topics of the most frequently attended workshops are technology-related -- e.g., use of computers and other equipment, programming, etc.

The teachers, for the most part, felt that their preparation was adequate if not very adequate in most areas. Interestingly, their perception of the adequacy of preparation was related to whether or not they had intended to be a business and office education teacher when they entered college. Of course, the time of their commitment to entering business and office education was related to the number of business and office education courses they ultimately completed. Two-thirds of the teachers had at least 1,000 hours of business and office experience before graduation, and most felt that such experience is important. Thirty-seven percent of the teachers have had jobs in business in the past five years.

The teachers felt that general professional education courses were either not worthwhile or ineffectively presented. They had mixed opinions about methods/curriculum courses, but felt that coursework in business and office education content and skills was beneficial. They also viewed student teaching experience quite favorably. Most lacking in their preservice training was attention to modern technology and equipment, testing and grading, classroom management, and dealing with various student characteristics and problems in

discipline and motivation. Topics teachers recommended for additional inservice training are consistent with much that has been discussed already:

- o computers and modern equipment;
- o current and future needs and characteristics of business;
- o classroom management, discipline, student motivation/ability, and testing/grading.

Most of the teachers surveyed are exclusively business and office education teachers. In the teaching of accounting and business knowledge courses, the predominant mode of instruction is teacher lecture or student reading of textbooks and completion of textbook activities during class. Many accounting teachers do not feel their students are using realistic practice sets or simulations. The Connecticut teachers have a very positive attitude towards curriculum development activities -- most indicating that many such activities have occurred within the past five years and about two-thirds feeling that the various activities have resulted in greater student achievement.

The teachers generally felt that they have kept up well with the changes in their field resulting from technological advancement. The one area in which it has been most difficult for them to keep up is the area of computer skills, data processing, etc. The major factors teachers see as problems affecting instruction and student achievement have to do with the low status of business and office education relative to other areas and various factors related to the abilities of the business and office education students.

The findings of the teacher survey are generally consistent with the views and research findings discussed in the literature review presented in an earlier chapter. Greater familiarity with modern technology, the needs of employers, and the job market; and better instructional skills related to classroom management, testing, and dealing with student differences are clearly needed by teachers nationwide. According to the literature, employers' perceptions of the desired competencies of entry-level office workers agree greatly with those of teachers, although employers may be a little more concerned about work ethics (e.g., tardiness, absenteeism) and general skills of human relations, problem solving, and language arts.

The results of the CAEP student assessment have implications for teacher education. Certainly the specific, item-level results should be examined by teacher educators as well as teachers receiving inservice training to gain a better understanding of the particular skills or concepts which students do not seem to be mastering. Such information should, of course, impact upon curricular emphases. For the purposes of this report, two more global findings of that assessment should be mentioned here: (1) the need to provide students with formal instruction in modern technology (e.g., computers) and (2) the need for greater instructional emphasis on realistic office activities such as actually producing a letter and making journal entries.

Recommendations

Recommendation 1

More than a third of the business and office education teachers in Connecticut were educated out of state, and almost half did not originally intend to become business and office education teachers upon entering college. As a result, they completed fewer business and office education courses. Therefore, it is important that certification requirements, and preservice and inservice training assure that the training of these teachers meets the required standards.

Recommendation 2

There is some specialization in the preparation of business and office education teachers. While this may not be a problem in a large school employing several business and office education teachers, the case may be different in a small school. If certification requirements are to assure that teachers are qualified to teach in a variety of settings, then they should require a wider range of business and office education coursework.

Recommendation 3

Teacher trainees should have teaching field experience before their senior year of college so that they will have some idea about the appropriateness of classroom teaching for them as soon as possible.

Recommendation 4

There is general agreement that business and office job experience is important for business and office education teachers. Such experience should be obtained before entering teaching and continued from time to time thereafter in order to update the office skills of the teachers.

Recommendation 5

The Connecticut teachers recognize the importance of keeping up with changes in office procedures and equipment, current and future business needs, and the job market. Information pertaining to these matters should be disseminated perhaps via state department or professional group newsletters or workshops.

Recommendation 6

Teachers prefer to attend inservice workshops during professional days during the week, and they feel it is important to receive course credit for this work. Districts should try to accommodate these wishes whenever possible and appropriate.

Recommendation 7

Teacher education institutions, state department personnel, and local school districts should consider the following topics priority areas for training: computer knowledge and skills, modern office equipment, testing and grading, classroom discipline, and instruction of students with varied abilities, motivation, etc.

Recommendation 8

In business knowledge and accounting courses, there is heavy reliance on the techniques of lecture and student use of textbooks. Preservice and inservice training should provide teachers with additional instructional "tools" to use and encourage the use of realistic classroom activities.

Recommendation 9

Mathematical and writing skills are critical to business and office work. Teachers need training in the teaching of these skills or they must be made aware of how to work cooperatively with teachers of mathematics and language arts to improve them.

Recommendation 10

Local school systems and the state department should continue in their efforts to raise the status of business and office education. It is important that all school personnel recognize the importance of the business and office education programs. Indications that such recognition is lacking include such things as the lack of counselor awareness of business and office education offerings and differential weighting of grades in business and office education versus other academic areas.

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APPENDIX A

Teacher Questionnaire with Response Frequencies (Percentages)

N = 820 for
Items 1-38, 108-160

CONNECTICUT ASSESSMENT OF EDUCATIONAL PROGRESS 1983-84

BUSINESS AND OFFICE EDUCATION

TEACHER QUESTIONNAIRE

DIRECTIONS

The purpose of this questionnaire is to provide information on business and office education teachers' backgrounds, preservice and inservice teacher training and attitudes and activities related to business and office education instruction. Such information will contribute to a more complete understanding of business and office education in Connecticut and will assist in the improvement of instructional programs across the state. At no time will results for individual teachers be reported.

The questionnaire is long. That is because it is associated with two different investigations by the State Department of Education. The first, of course, is the assessment of students' business-related knowledge and skills. The second investigation is a study of business teacher education in Connecticut intended to identify ways in which teacher education can be improved. The time you spend to complete the entire questionnaire will be time well spent and will provide the State Department of Education with important information.

For purposes of accounting for materials, please write your name and the name of your school on the envelope you have been given. Write the name of your school only in the space provided at the top of your answer sheet. Record all answers to the remaining questionnaire items on the separate answer sheet by darkening the appropriate spaces using a #2 pencil. There are four important short-answer questions you should answer on the back of the answer sheet. When you have completed the questionnaire, insert the answer sheet in the envelope provided and seal it. Return this envelope as soon as possible to the Test Coordinator in your school. You may keep the questionnaire booklet itself. In fact, you may wish to record your responses in the booklet as well, in order to compare your responses with statewide results when they are made available. REMEMBER, YOUR ANSWERS WILL BE KEPT SEALED UNTIL THEY ARRIVE AT THE SCORING CENTER. THEY WILL REMAIN CONFIDENTIAL THEREAFTER, AND NO ONE IN YOUR DISTRICT WILL EVER SEE THEM.

CONNECTICUT STATE BOARD OF EDUCATION

TEACHER BACKGROUND

1. How many years have you been teaching?

2 A. 1 year
5 B. 2 to 3 years
12 C. 4 to 8 years
34 D. 9 to 15 years
47 E. more than 15 years

2. What is your highest degree or completed academic program?

15 A. Bachelor's degree
58 B. Bachelor's degree + 30 hours or Master's degree
27 C. Master's degree + 30 hours or sixth year
1 D. Doctorate

3. In which area below have you completed the most coursework in a master's program?

43 A. business education
16 B. education - curriculum or instruction
9 C. education - administration
7 D. education - guidance or counseling
10 E. education - other
6 F. other
7 G. I have not done graduate work.
1 N/R

4. When did you receive your undergraduate degree?

9 A. 1979-1983
11 B. 1974-1978
23 C. 1969-1973
18 D. 1964-1968
13 E. 1959-1963
28 F. before 1959

5. Where did you receive your undergraduate degree?

9 A. University of Connecticut
34 B. Central Connecticut State University
18 C. other in-state college or university (specify on answer sheet)
38 D. other out-of-state college or university (specify on answer sheet)
1 N/R

N/R = No Response

How many **undergraduate** and **graduate** courses have you taken in each of the following areas? Consider one course equivalent to 3 or 4 credits. Your actual course titles may be different from the general topics below. Please mark <u>two</u> answers for each row — one for undergraduate and one for graduate courses.

		Number of Undergraduate Courses						Number of Graduate Courses					
		0	1	2	3	4 or More	N R	0	1	2	3	4 or More	N/R
6.	Typing	14	15	29	17	22	2	61	17	4	1	1	16
7.	Shorthand/Notetaking	35	6	17	15	24	3	68	11	3	0	0	17
8.	Office Systems, Records Management, etc.	25	35	24	7	5	4	60	16	5	2	1	17
9.	Word Processing	84	8	2	1	1	4	70	11	2	0	1	16
10.	Data Processing/Computers	54	25	9	2	4	6	48	21	7	4	5	15
11.	Accounting	3	5	32	18	41	2	58	13	6	2	4	17
12.	Economics	5	25	37	13	17	2	55	16	7	2	3	16
13.	Marketing	22	37	19	8	13	2	61	12	6	1	3	17
14.	Business Administration	27	28	16	7	20	3	49	17	8	3	7	16
15.	Managerial Communications	38	38	13	4	3	4	62	14	4	1	2	17
16.	Business Law	5	34	46	8	6	2	63	13	4	1	2	17
17.	General Education (principles, philosophy, etc.)	9	7	16	16	49	4	14	13	19	11	30	13
18.	Business and Office Education Methods or Curriculum	16	16	19	17	28	4	31	16	16	9	13	15
19.	Other Business or BOE Courses	13	10	18	13	41	6	34	11	15	8	15	17
20.	Math or Math-Related Field	6	18	35	21	18	3	55	14	7	3	3	18
21.	English or Other Language Arts Field	2	4	15	22	54	3	59	10	7	2	5	17

22. What kind of certification by the State of Connecticut do you have to teach BOE courses?

16 A. provisional
82 B. standard
2 C. I am not certified to teach BOE courses.
1 N/R

23. Did you intend to become a BOE teacher when you entered college?

48 A. yes
51 B. no
1 N/R

24. Did your preservice program provide you with field experience in the schools prior to your senior year?

44 A. yes
55 B. no
1 N/R

25. How many weeks of student teaching did you have?

7 A. four weeks or fewer
10 B. five or six weeks
21 C. seven or eight weeks
30 D. nine or ten weeks
31 E. more than ten weeks
2 N/R

26. Did you student teach in more than one course?

89 A. yes
10 B. no
1 N/R

27. Did you participate in student teaching experiences in any of the BOE courses you are now teaching?

78 A. yes
21 B. no
1 N/R

28. As part of your student teaching, did you teach entire classes independently?

93 A. yes
6 B. no
1 N/R

29. Before the completion of your bachelor's degree, did you have at least 1000 hours of business and office related paid work experience?

68 A. yes
31 B. no
1 N/R

How adequate has your preparation (preservice and inservice) been in each of the following areas?

	Very Adequate	Marginally Adequate	Not Adequate	N/R
30. classroom management/ records	60	30	10	1
31. preparation of lesson plans	78	18	4	1
32. long range planning	56	34	9	1
33. maintaining discipline	50	32	17	1
34. test preparation and grading	64	29	6	1
35. presentation of material to students	76	20	3	1
36. use of office equipment	55	35	9	1

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37. What do you think your primary job will be in five years?

43 A. working at my present job
17 B. teaching other business education courses
5 C. being a school administrator
3 D. working in education, but not as a classroom teacher or administrator
13 E. working outside education
15 F. I will be retired.
4 G. other
1 N/R

38. How long ago did you hold a position in the business world utilizing the BOE skills that you teach?

17 A. I currently hold such a position.
20 B. not currently, but within the past 5 years
17 C. 5-10 years ago
37 D. over 10 years ago
9 E. never
1 N/R

GO TO PAGE 6.

N = 380 for
Items 39-51

PROGRAMS AND PRACTICES

THE NEXT THREE SECTIONS RELATE TO THE AREAS OF GENERAL BUSINESS KNOWLEDGE, ACCOUNTING, AND SECRETARY/GENERAL OFFICE. RESPOND TO THE QUESTIONS IN ONLY THOSE SECTIONS APPROPRIATE TO COURSES YOU HAVE TAUGHT IN THE LAST THREE YEARS.

GENERAL BUSINESS KNOWLEDGE

RESPOND TO QUESTIONS 39 TO 51 ONLY IF YOU HAVE TAUGHT COURSES IN GENERAL BUSINESS KNOWLEDGE AREAS (E.G., BUSINESS DYNAMICS, ECONOMICS) IN THE PAST THREE YEARS. OTHERWISE SKIP TO QUESTION 52.

When teaching classes in general business knowledge areas, how often does each of the following event(s) occur in your class(es)?

	Never	A Few Times A Year	At Least Once A Month	At Least Once A Week	Just About Daily
39. Teacher and students discuss current events in class which pertain to world of business.	3	8	10	41	37
40. Outside speakers visit the classroom.	16	68	15	2	0
41. Students visit community businesses and/or government offices.	52	45	2	1	1
42. Students read textbook or do activities in textbook during class.	4	13	8	30	45
43. Students see films and filmstrips or use cassettes and videotapes in class.	7	39	38	15	1
44. Students use microcomputers to practice business-related computer skills.	68	17	5	4	6

Business and office education has the difficult challenge of keeping up with rapidly changing technology and practices. How well have you been able to keep up with such changes in each of the following areas?

	Very Well	Marginally	Not at All
45. economics/finance	55	38	7
46. business management/organization	52	42	6
47. business law	40	47	13
48. human relations in business	57	41	3
49. business mathematics skills	60	35	5
50. computer skills	34	48	18
51. writing skills	47	45	7

ACCOUNTING

N = 360
for Items 52-61

RESPOND TO QUESTIONS 52 TO 61 ONLY IF YOU HAVE TAUGHT COURSES IN ACCOUNTING IN THE PAST THREE YEARS. OTHERWISE SKIP TO QUESTION 62.

When teaching classes in accounting, how often does each of the following event(s) occur in your class(es)?

	Never	A Few Times A Year	At Least Once A Month	At Least Once A Week	Just About Daily
52. Teacher and students discuss current events in class which pertain to world of business.	5	29	22	30	14
53. Teacher presents information most of the class period while students listen or take notes.	7	10	10	56	17
54. Students visit community businesses and/or government offices.	67	30	0	2	1
55. Students read textbook or do activities in textbook during class.	0	4	3	23	70
56. Students use realistic practice sets or simulations addressing many skills and/or concepts at the same time.	3	58	8	13	17
57. Students use microcomputers to practice business-related computer skills.	54	28	8	8	2
58. Students use calculators in class.	2	2	3	12	82

Business and office education has the difficult challenge of keeping up with rapidly changing technology and practices. How well have you been able to keep up with such changes in each of the following areas?

	Very Well	Marginally	Not at All
59. accounting procedures	69	27	4
60. data processing	31	53	16
61. use of adding and calculating machines	75	22	3

SECRETARY/GENERAL OFFICE

N = 500
Items 62-95

RESPOND TO QUESTIONS 62 TO 95 ONLY IF YOU HAVE TAUGHT COURSES IN SECRETARY/ GENERAL OFFICE IN THE PAST THREE YEARS. OTHERWISE SKIP TO QUESTION 96.

When teaching secretary or general office skills (e.g., typing, shorthand, office practice), how often does each of the following event(s) occur in your class(es)?

	Never	A Few Times A Year	At Least Once A Month	At Least Once A Week	Just About Daily
62. Teacher and students discuss current events in class which pertain to world of business.	7	24	29	30	11
63. Teacher presents dictation for students to transcribe.	33	6	5	18	39
64. Teacher presents rough draft materials for students to type in mailable form.	1	11	28	46	14
65. Teacher presents straight copy for typing accuracy.	3	5	11	44	37
66. Students are required to compose mailable letters/memos from information given.	10	34	26	20	11
67. Students do machine transcription.	44	21	13	12	11
68. Students use word processing equipment.	39	17	9	12	24
69. Students use reprographic equipment.	44	32	9	8	7
70. Students use microcomputers to practice business-related computer skills.	59	18	6	8	10
71. Students see films and filmstrips or use cassettes and videotapes in class.	26	49	15	8	2
72. Students visit community businesses and/or government offices.	50	47	2	0	0
73. Outside speakers visit the classroom.	15	71	13	0	0

How important is each of the following skills to today's secretaries/general office workers?

	Very Important	Somewhat Important	Of Little Importance	Not Important At All
74. shorthand/notetaking	55	41	4	0
75. typing	98	2	0	0
76. word processing	91	9	0	0
77. records management	77	22	1	0
78. machine transcription	54	43	3	0
79. record keeping	62	34	3	0
80. writing skills	93	7	0	0
81. mathematics skills	77	22	1	0
82. computer skills	76	22	1	0
83. interpersonal skills	94	6	0	0
84. current office techniques and practices	92	8	1	0

Business and office education has the difficult challenge of keeping up with rapidly changing technology and practices. How well have you been able to keep up with such changes in each of the following areas?

	Very Well	Marginally	Not at All
85. shorthand/notetaking	59	23	18
86. typing	89	10	1
87. word processing	52	41	7
88. records management	42	48	10
89. machine transcription	41	39	20
90. record keeping	51	39	10
91. writing skills	65	30	5
92. mathematics skills	54	40	6
93. computer skills	44	44	13
94. interpersonal skills	76	22	2
95. current office techniques and practices	61	36	3

N = 635 for
Items 96-107

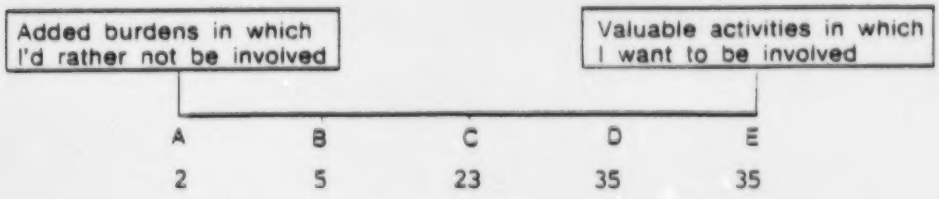
THE REMAINING QUESTIONS IN THIS QUESTIONNAIRE ARE FOR BOE TEACHERS IN ALL THREE AREAS.

IF YOU HAVE NOT WORKED IN THIS SCHOOL FOR FIVE YEARS, SKIP AHEAD TO ITEM 108.

Indicate which of the following types of curriculum development activities in business and office education have occurred in your school in the past five years and how they have affected student achievement in business and office education.

	Has Not Occurred In Past 5 Years	Has occurred within last 5 years with the following effect:		
		Greater Achievement	No Change In Achievement	Less Achievement
96. systematic review of program	11	60	27	2
97. change of textbooks	10	59	30	1
98. revision of scope and sequence	16	51	32	1
99. introduction of supplementary materials	8	74	18	0
100. use of new teaching strategies	11	68	21	0
101. use of new objectives	10	63	26	1
102. addition of course(s)	19	63	17	1
103. deletion of course(s)	25	24	32	19
104. introduction of word processor(s)	10	80	10	1
105. introduction of computers	15	74	11	1
106. articulation with other curricular areas (language arts, mathematics, etc.)	40	31	27	3

107. Select a point on the continuum below to indicate how you feel generally about the curriculum development activities listed in items 96-106.



108. What is the <u>total</u> enrollment in all of the BOE classes you teach? (Add your class enrollments even if some students are counted twice.)

4	A. less than 30	12	F. 71-80
2	B. 30-40	13	G. 81-90
5	C. 41-50	19	H. 91-100
6	D. 51-60	28	I. Over 100
9	E. 61-70	2	N/R

109. How have enrollments in the BOE courses you teach changed over the past 5 years?

32 A. increased
32 B. decreased
28 C. stayed the same
7 D. I do not know.
2 N/R

110. How many <u>different</u> non-business education teaching preparations do you have each day (e.g., social studies, mathematics)?

85	A. 0	2	E. 4
5	B. 1	1	F. 5
3	C. 2	0	G. more than 5
3	D. 3	1	N/R

111. How much specific attention do you give to your students' writing skills (grammar, expression, etc.)?

45 A. a great deal of attention
44 B. moderate attention
10 C. very little attention
1 N/R

112. When you and another business education teacher in your school teach different sections of the <u>same</u> course to similar high school students, are you <u>required</u> to use the same instructional materials (textbooks, office machines, etc.)?

62 A. yes
32 B. no
5 C. There is only one teacher for each of the business education courses.
1 N/R

113. Do you feel that your school's scheduling allows enough time for field trips so that the students may see first-hand the way the business world operates?

59 A. yes
40 B. no
1 N/R

TEACHER ATTITUDES

114. How important do you feel it is for most business education students to further their education beyond high school?

68 A. very important
30 B. somewhat important
2 C. of little importance
1 D. not important at all

0 N/R

115. In your opinion, how does holding a job generally affect a student's school work?

37 A. It hinders performance in school.
47 B. It hinders performance only when a student works more than 20 hours a week.
8 C. It has little effect on performance in school.
8 D. It improves performance in school.

0 N/R

116. Overall, how do you rate the motivational level of your students with respect to their BOE school work?

18 A. highly motivated
70 B. moderately motivated
11 C. poorly motivated

0 N/R

117. How do you feel about the achievement of the business education students in this school?

15 A. Nearly all of the students are achieving as well as they can.
41 B. More than half of the students are achieving as well as they can.
28 C. Approximately half of the students are achieving as well as they can.
12 D. Fewer than half of the students are achieving as well as they can.
4 E. Only a few of the students are achieving as well as they can.

1 N/R

118. How important is it that the preparation of business teachers include work experience in business?

66 A. very important
28 B. somewhat important
5 C. of little importance
1 D. not important at all

0 N/R

The following factors may affect instruction and, ultimately, achievement in business education courses. In your opinion, how much of a problem is caused by each of the following in your school?

		Serious Problem	Somewhat of a Problem	Not A Significant Problem	N/R
119.	a general belief that business education is less important than other subjects	39	44	16	1
120.	less "weight" given to business course grades	25	35	40	0
121.	out-of-date teaching materials	13	28	58	0
122.	out-of-date teaching equipment	22	33	45	0
123.	the mismatch between student reading ability and the business materials they are required to use	11	45	44	0
124.	the mismatch between student math ability and the business materials they are required to use	14	52	33	1
125.	teachers inadequately prepared to teach business education courses	5	16	80	0
126.	teachers' expectations of students generally too low	5	33	61	0
127.	inadequate articulation of curriculum across courses taught in business education department	6	27	65	2
128.	lack of support and/or recognition for business teachers from the administration	17	30	53	1
129.	teachers' views not incorporated into curricular decisions	13	30	57	0
130.	varying levels of intellectual ability within a specified class	21	60	19	0
131.	varying grade levels (9-12) within a specific class	9	39	52	0
132.	guidance counselor's lack of awareness of the business education department's course offerings	33	39	27	1

INSERVICE ACTIVITIES

133. To how many professional business educators' organizations do you belong?

14 A. 0
39 B. 1
27 C. 2
19 D. 3 or more
1 N/R

134. How many business education periodicals do you read regularly?

3 A. 0
47 B. 1 or 2
42 C. 3 or 4
8 D. 5 or more
1 N/R

135. How many inservice business education workshops do you attend yearly?

10 A. none
25 B. one
45 C. two or three
12 D. four or five
8 E. more than five
1 N/R

136. Is participation in a workshop in a teacher's particular field of study required by your administration?

16 A. yes
83 B. no
1 N/R

137. Is participation in a workshop in a teacher's particular field of study encouraged by your administration?

69 A. yes
30 B. no
1 N/R

The following agencies provide inservice business and office education programs. For each agency, rate the programs you have attended.

	Very Worthwhile	Somewhat Worthwhile	Of Little Worth	Not Worthwhile At All	Have Not Participated	N/R
138. State Department of Education	33	34	5	2	25	2
139. Local School System	14	39	16	8	20	4
140. Professional Organizations	29	36	7	1	25	3
141. Private Industry	26	29	5	2	39	3
142. Regional Educational Service Centers	8	19	7	2	60	4
143. Teacher Centers	6	17	6	2	64	5

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Have you participated in inservice workshops in the following areas in the past three years?

	Yes	No, but they were available.	No, they were not available, but I wish they were.	No, they were not available, but I would not have attended anyway.	N/R
144. teaching techniques/methods	49	15	22	10	3
145. curriculum review/change	58	15	19	7	3
146. evaluation and testing	28	13	34	21	4
147. classroom management	21	17	31	27	4
148. use of computers in the classroom	72	14	11	2	2
149. BASIC computer programming	54	22	15	6	3
150. computer software (spread sheet programs, data sheet programs, etc.)	41	24	25	6	4
151. word processing	61	19	13	5	2
152. use of other equipment in instruction	34	18	31	13	4
153. alphabetic shorthand	13	28	18	37	4
154. new technology and procedures in business/ offices	38	19	32	9	3
155. entry-level business employment information	36	11	40	10	4
156. writing skills	11	22	36	27	3
157. mathematics skills	8	19	32	38	3

158. Assuming time and expense are of no concern, would you be willing to travel for an hour or more to attend inservice workshops you feel would be helpful?

78 A. yes
21 B. no
1 N/R

159. Which of the following times for attending inservice workshops do you most prefer?

10 A. weekdays after school
82 B. weekdays with time charged as professional days
3 C. weekends
4 D. summers
2 N/R

160. How important to you is receiving course credit for attending inservice workshops?

30 A. very important

27 B. somewhat important

41 C. not very important

1 N/R

EVALUATION OF PRESERVICE

PLEASE WRITE YOUR ANSWERS TO QUESTIONS 161 TO 165 ON THE BACK SIDE OF YOUR ANSWER SHEET. NUMBER YOUR ANSWERS.

161. What components of your undergraduate preservice teacher training were the least beneficial or least effectively presented? (Consider general activities and/or coverage of specific content.)

162. What components of your undergraduate preservice teacher training were the most beneficial or most effectively presented? (Consider general activities and/or coverage of specific content.)

163. What was lacking from your preservice training that would be beneficial in preservice training now, considering the needs of BOE students today?

164. List the 2 or 3 topics in which you feel it would be most useful for you to receive inservice training.

Thank-you for your assistance.

APPENDIX B

Results for Non-Multiple-Choice Questionnaire Items

QUESTION #161: What components of your undergraduate preservice teacher training were the least beneficial or least effectively presented? (Consider general activities and/or coverage of specific content.)

General Answers (named courses)

NUMBER OF RESPONSES	RESPONSE CATEGORY
172	General ED Courses (Psych, Phil, History of Ed)
163	Methods/Curriculum Courses
18	Content Area Courses

Specific Answers

38	Poor instruction in presentations
35	Irrelevant/inadequate content
22	Criticisms of program (student teaching (14), time, sequence, etc.)
117	Inattention to specific topics

(38) 1. discipline
(28) 2. classroom management
(27) 3. test preparation/grading
(13) 4. availability and/or use of equipment (including AV)
(9) 5. student characteristics (dealing with)
(2) 6. professional requirements/ organizations

373 No response due to

a) no answer on returned questionnaire
b) written response citing reasons for no response (ex. too long ago)

QUESTION #162 What components of your undergraduate preservice teacher training were the most beneficial or most effectively presented? (Consider general activities and/or coverage of specific content.)

General Answers (named courses)

NUMBER OF RESPONSES	RESPONSE CATEGORY
201	Content Area Courses (BOE-skills)
177	Methods/Curriculum (includes lesson plan preparation)
22	General Ed Courses (Psych, Phil, History or Ed)
12	Non BOE Courses
3	Computer Related Courses

Specific Answers

199	Student teaching (includes supervisory teachers - visitations)
18	Working prior to/in addition to teaching (practical and coop.)
15	College faculty (includes instructional data)
12	Test preparations/grading
10	Classroom management
8	Discipline
8	Availability and/or use of equipment (includes AV)
3	Student characteristics (dealing with)

302 No response due to

a) no answer on returned questionnaire
b) written response citing reasons for no response (ex. too long ago)

QUESTION #163 What was lacking from your preservice training that would be beneficial in preservice training now, considering the needs of BOE students today?

NUMBER OF RESPONSES	RESPONSE CATEGORY
79	Up to date Boe course methods and contents curriculum
76	Discipline-related topics (includes drugs, alcohol, etc.)
68	Up-to-date equipment technology and use (AV and hands on training)
66	Teacher training program coordination and operation (more visitations, more student teaching, experienced teachers' techniques, time, sequence, etc.)
55	Coop. training
52	Computer-related courses (including word processing, technical evaluations and software evaluations)
52	Student characteristics (sociological minorities. LD. slow learner, un/low motivated, psychology of and attitudes and expectations of physical handicapped)
44	More relationsip with business community (needs assessment)
26	Instruction/presentations (improvement of)
20	Test preparation and grading (includes records management)
16	Administrative structure and procedures (budgeting, ordering, forms, etc.)
3	General knowledge of course (basics)
3	Remediation courses (Math, Reading, English Grammar)
319	No response due to a) no answer on returned questionnaire b) written response citing reasons for no response (ex. too long ago)

QUESTION #164: List the 2 or 3 topics in which you feel it would be most useful for you to receive inservice training.

NUMBER OF RESPONSES	RESPONSE CATEGORY
414	Computer Training (including operational usage, reprographics, software, word processing, keyboarding, data processing)
109	Workshops for current/future employer required skills (including resume preparation, interview techniques, career ed., etc.)
104	Technological Equipment/Systems Update (including how to pick equipment and AV equipment)
95	Computer Programming (BASIC, ADV. BASIC COBOL, PASCAL, etc.)
95	BOE Information and Methods Update (including new courses such as consumer laws, agencies, taxes, economics, geography, office equipment - electronic, business math)
42	Discipline handling tecnhiques (including handling parent conferences)
38	Test preparation and grading (including records management)
35	Student characteristics (including individual cultural differences, mainstreaming special students, drugs, alcohol, teenage suicide)
30	Motivation techniques
29	Classroom management
6	Technical equipment repair
6	Non-BOE courses (Phil of Ed., Proofreading, Investments, 1st Aid-CPR, Note-taking, Improvement of Spelling/Punctuation)

QUESTION #164: (continued)

NUMBER OF RESPONSES	RESPONSE CATEGORY
61	Teacher problems
	(14) 1. coordination with other schools/ depts. (including guidance)
	(13) 2. communication skills
	(11) 3. teacher burnout
	(7) 4. teacher rights and law (including school law)
	(6) 5. stress management
	(5) 6. administrative structure and procedures (budgeting, ordering, fund raising, policies, enrollment increase, scheduling)
	(5) 7. grant writing and availability
236	No response due to
	a) no answer on returned questionnaire
	b) written response citing reasons for no response (ex. too long ago)

QUESTION 5 SUPPLEMENT

LOCATION OF UNDERGRADUATE DEGREE INSTITUTIONS

C. Other In-State

56 University of Bridgeport

22 University of Hartford

19 Sacred Heart University

17 Quinnipiac College

11 Annhurst College

5 Fairfield University

4 St. Joseph College

3 Southern Connecticut

3 University of New Haven

2 Western Connecticut

1 Connecticut College

1 Diocesan Teachers College

1 Eastern Connecticut State University

D. Other Out of State Schools

MASSACHUSETTS	QUANTITY	SCHOOL
85 teachers	27	American International College
	25	Salem State
	12	Boston University
	3 each of	Northeastern University, Western, N.E. College
	2 each of	Merrimack College, Simmons College, Suffolk University, Tufts University
	1 each of	Boston College, Clark University, Emmanual, Holy Cross College, Mt. St. Vincent, Nichols College, University of Massachusetts
NEW YORK		
43 teachers	6	New York University
	3 each of	CCNY, Fordham Univ., Hunter College, New Rochelle, Pace Univ., Syracuse Univ.
	2	University at Albany
	1 each of	Baruch College - City Univ. of New York, College of White Plains, Columbia, Elmira, Huron College, Ithaca College, Lehman College - CU of N.Y., Long Island Univ., Manhattan College, Nazarath College, N.Y. Institute of Technology, Queens College, Russell Sage, St. Bonaventure Univ., State College of N.Y. at Albany, Troy Univ., Univ. of Steubenville
RHODE ISLAND		
43 teachers	33	Bryant College
	7	University of Rhode Island
	1 each of	Barrington College, Johnson and Wales College, Providence College

NOTE: Schools are not listed for the remaining states.

STATE	NUMBER TEACHERS
Maine	19
Pennsylvania	15
New Hampshire	14
North Carolina, Vermont	9 each
New Jersey, Ohio	8 each
Illinois	5
South Carolina, Tennessee, Virginia, West Virginia	4 each
Florida, Michigan	3 each
Indiana, Iowa, Kentucky, Missouri, Nebraska, Washington, Wisconsin	2 each
Alabama, California, Delaware, Georgia, Louisiana, Maryland, Minnesota, North Dakota, Oklahoma, South Dakota, Puerto Rico	1 each

APPENDIX C

State of Connecticut Certification Requirements

for Business and Office Education

STATE OF CONNECTICUT CERTIFICATION REQUIREMENTS

Current Requirements for Provisional Certificate

I. Bachelor's degree from approved institution

II. Minimum of 45 semester hours credit in general education courses such as English, Mathematics, Science, etc.

III. Minimum of 18 semester hours credit in professional education including Foundations of Education, Educational Psychology, Curriculum and Methods of Teaching, Student Teaching, Guidance, Health, and Safety Education

IV. Minimum of 30 semester hours credit in one or two areas of business subject matter

V. Course in U.S. History

Proposed Certification Requirements

(Proposed - August 30, 1984)

I. Initial Certificate Middle and Secondary

A. General Education (minimum of 45 semester hours)

1. Communication/English (minimum 6 hours)

a. Literature
b. Speech
c. Writing

2. Mathematics (minimum 6 hours)

a. Mathematics Structure and Application
b. Logic

3. Science (minimum 6 hours)

a. Life
b. Physical
c. Earth

4. Social and Behavioral Sciences (minimum 6 hours)

a. Anthropology
b. Economics
c. Geography
d. Government
e. History

f. Political Science
g. History and Sociology

5. Foreign Languages (minimum 6 hours)

NOTE: Optional for Vocational Education Student Teachers

6. The Arts (minimum 3 hours)

a. Dance
b. Drama
c. Music
d. Visual Arts

7. Human Growth and Development/Psychology (minimum 3 hours)

a. Physical and Mental Health
b. Social, Emotional and Cognitive Development

8. Technology in the Workplace (minimum 6 hours)

a. Work Experience
b. Apprenticeship Training

9. Career Decision-Making — Internships (minimum 6 hours)

10. Other

B. Credit or Non-Credit Observation/Interaction Experience with Grade 5-12 Students Prior to College Junior Year

C. Professional Education (minimum 24 hours)

1. Foundations of Education (minimum 3 hours)

a. Philosophy of Education
b. History of Education
c. Vocational and Career Education
d. Comparative Education

2. Human Growth and Development and Educational Psychology (minimum 3 hours)

a. Special Education (minimum 3 hours)

3. Curriculum and Methodology (minimum 6 hours)

a. Methods of Teaching a Vocational Area
b. Curriculum and Curriculum Development in a Vocational Area

(e.g., Learning Resources and Technology -- Computer Software)

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4. Supervised Student Teaching (minimum 9 hours)

a. Full School Day or Equivalent (minimum 14 weeks)

(1) Non-Handicapped Students
(2) Exceptional Students
(a) Handicapped
(b) Gifted

(3) Different Cultural/Economic Background
(a) Students
(b) Families

D. Endorsements in Business and Office Education (minimum 30 hours)

1. Keyboarding/Information Systems (minimum 3 hours)

2. Accounting (minimum 3 hours)

3. Economics

4. Law and Methodology Appropriate to Business Subjects

5. Office Systems (minimum 3 hours)

6. 1,000 Hours of Office-Related Paid Work in Past 5 Years

7. Other

II. Professional Middle and Secondary Certificate

A. Business and Office Education (minimum 30 additional hours)

1. Critical Issues in Business Education

2. Organization and Administration of Vocational Business Education (minimum 3 hours)

3. Current Trends in Teaching Methods and Curriculum Implications (minimum 3 hours)

4. Current Information and Developments

5. 150 Hours Paid Non-Teaching Office Work Experience

6. Other

APPENDIX D

NABTE Standards

NABTE STANDARDS

I. General Studies (1/3 Baccalaureate Program)

A. Symbolics of Information

1. Linguistics
2. Languages
3. Communication Skills
4. Mathematics
5. Logic
6. Information Theory

B. Physical Science

C. Behavioral Sciences

D. Humanities

E. Other

II. Foundation Studies (1/4 Baccalaureate Program)

A. Accounting

B. Business Organization

C. Business Finance

D. Data Processing

E. Economics

F. Information Processing

G. Legal Aspects of Business

H. Management

I. Marketing

J. Organizational Behavior

K. Operations Management

L. Personal Finance

M. Quantitative Analysis

III. Specialized Business Studies (1/4 Baccalaureate Program)

A. High Level Competencies in Business Occupations for which Students will be Trained

B. Other

IV. Professional Studies (1/6 Baccalaureate Program)

A. Humanistic Studies

1. History of Education
2. Philosophy of Education

B. Teaching-Learning Theory

C. Practicum (after competencies in general education)

D. Other

V. Research

A. Research Principles

B. Research Results Application

C. Professional Literature Interpretation